

**DEPARTMENT OF MINES, MINERALS & ENERGY  
DIVISION OF MINED LAND RECLAMATION  
PERMIT ENHANCEMENT WORK GROUP  
AND  
REGULATORY WORK GROUP**

**Oxbow Center, St. Paul, Virginia**

**December 11, 2006**

**9:00 a.m. and 1:00 p.m.**

Greg Baker	Lynn Haynes	Tad Nunley
Bob Blackstock	Buddy Hamilton	Joey O'Quinn
Gavin Bledsoe	Ronald Hull	Tabitha Peace
Tim Browning	Roberta E. Hylton	Mike Pinder
Carolyn Cannella	John P. Jones	Annette Poore
Cliff Carson	Roger Jones	R. J. Poore
Gerald D. Collins	Daniel Kestner	Donna Puckett
Tim Compton	Roman Lawson	Gerald Ramsey
Lance DeBoard	Tom Mackey	Michael Smith
Mike Edwards	Keith Mohn	Mark Sproles
Brian Evans	Harve Mooney	Jonathan Stamper
David Gruber	James Mullins	Les Vincent

**PERMIT ENHANCEMENT WORK GROUP**

**LesVincent** opened the meeting and sign-in sheets were passed around.

**Non-Agenda Item**

**Les** discussed temporary cessations. In connection with the enforcement section, Division of Mined Land Reclamation (DMLR) will be gathering data on temporary cessations (TC), for the companies that have them, and will be making decisions whether to leave the permit in temporary cessation status or whether reclamation should begin. This item ties into the third agenda item, Total Maximum Daily Loads (TMDL), as one company has experienced bumping the limit on a load in a watershed on a new permit. This effect IS DUE TO existing outfalls, as they are taking up load limits. Preliminary work will begin on January 14, 2007, by the TC work group.

**Virginia Water Quality Standards**

**Les** advised that DMLR has been looking at incorporating the general criteria into our Enforcement procedures. This is an in-stream standard, as opposed to a

National Pollutant Discharge Elimination System (NPDES) outfall effluent limit and is an existing water quality standard. The general criterion is a narrative standard opposed to a numeric standard and relates to in-stream water quality opposed to the effluent from ponds.

There have been misunderstandings as to how this is going to be applied and how it has been applied. Three or four violations were written with mistakes on them, and were retracted. New guidance is being written. This will not be written as a color-standard alone. This is a two-part test. For the standard to be violated, it will also have to be inimical or harmful to human, animal, plant or aquatic life.

Specific substances to be controlled include but are not limited to: floating debris, oil, scum, and other floating material; toxic substances (including those which bio-accumulate); substances that produce color, tastes, turbidity, odors, or settle to form sludge deposits; and substances which nourish undesirable or nuisance aquatic plant life. Effluents, which tend to raise the temperature of the receiving water, will also be controlled. Conditions within mixing zones established according to **9 VAC 25-260-20 B** do not violate the provisions of this subsection.

There must be documentation through lab analysis before the violation is cited that will show there is something in the water causing these problems. These efforts will be targeted at solids, primarily toward slurry, and the agency still has zero tolerance for black water discharges. With black waters spills, there would be an effluent violation, and the narrative in-stream standard would also apply. This is an existing water quality standard.

Violations will be issued in cases where there is clear documentation of something in the water, causing the problem, that fits the General Criteria of **9VAC 25-260-20**. This will involve in-stream sampling, up-stream samples, with the discharge looked at for the specific parameters that apply for the effluent. If true slurry is coming out there could be two violations, the discharge and the in-stream standard. Sampling will be above the discharge in-stream and below, determining the extent of the pool or slug of water causing problems. This will be used for purposes of determining the penalty amounts. The larger the problem is, the larger the penalty will be. Appropriate tests will be done. If the Department of Environmental Quality (DEQ) is involved, it will be determined which agency will take action.

This will not be just for slurry, as a haul road could be the problem. The same standard would apply. A haul road would be a good example of a solid issue, with no effluent limit. The violation could be for not maintaining the roads or sumps not cleaned out. This will give DMLR the ability to address water quality standards that result from haul roads.

For action to occur, the inspector must feel the situation is warranted and they will take the appropriate samples. If the inspector needs assistance in making a

decision on whether the general criteria has been violated he/she will confer with DMLR management and decide, whether or not action will be initiated under the standard. A visual reference standard has been developed in the office for the enforcement staff with bottles containing slurry concentrations of 500 milligrams per liter. Violations can be contested, but the General Criteria water quality will be enforced.

Tad Nunley suggested using turbidity measurement as a guideline, with Les repeating suggestions were welcome.

DMLR wants violations issued only when warranted, with a goal of none. Les will be drafting the guidance and asked the group to email or call him with any comments.

### **Recent Proposed/Final Rules (Federal Office of Surface Mining & U.S. Army Corps of Engineers)**

Les discussed the Office of Surface Mining's (OSM) publishing on October 10, 2006, Ownership and Control permit and implication information, transfer, assignment, or sale of permit rights, proposed rule, which closed December 11, 2006. This was the second effort by OSM to comply with a settlement agreement of a lawsuit by the National Mining Association, whereby they agreed to propose rules. OSM has pointed out they only agreed to propose the rules, not finalize them.

OSM is recognizing that improvidently issued permits are the states' responsibility in the new draft, which the states agree is the proper way to address that issue. OSM has no role in the permitting process. This is being modified to reflect that it is a state agency decision.

DMLR did not like OSM's proposal to take out the section of the permit where you included ownership and control, your owners and controllers. OSM is proposing that the state investigate to find out who this really is.

Improvidently issued permits will probably be finalized. This is a big issue, as noted in a Ten Day Notice (TDN) appeal in West Virginia, whereby OSM, Rebecca Watson, deputy secretary wrote a four page decision that OSM can't get involved. The Interstate Mining Compact Commission (IMCC) and the states have submitted comments that this ruling was appropriate and supports the proposal by OSM to change the improvidently issued permits section. DMLR has been doing things in Virginia pretty much in accord with past court decisions, with the provision if an OSM regulation is struck in a federal court, so falls the Virginia rule. DMLR has been doing this since day one, with other states continuing with what they had in place before, and ignoring the federal court decision. Basically DMLR defaults back to their prior regulation.

On August 30, 2006, OSM published *Final Rules for Topsoil Re-distribution Re-vegetation Success Standards*, final rule. A rule that came out in April, for Tennessee, is worth looking at. In April, OSM published a Tennessee proposed rule that covers some of this type of thing. Primarily this addressed acid mine drainage (AMD), but it also has ground cover, wildlife habitat, forestry, where it talks about the ground cover, and recognizing you don't go to have 90 percent ground cover for native hardwood forests. The final rule that was published on August 30, 2006, basically creates a provision that allows each state to develop its own standards to measure success. This was the last bullet on the agenda for the Regulatory Work Group. This rule was pending at the August 3 meeting, but had not been finalized. This now gives DMLR the opportunity to take advantage of this and get some realistic success standards, using some of the Virginia Tech and University of Kentucky reforestation methods, and Appalachian Regional Reforestation Initiative techniques that allow hardwoods to grow at a much better rate than what has been achieved historically.

The U.S. Army Corps of Engineers (ACOE) published, September 26, 2006, a proposal to re-issue and modify nationwide, twenty-one permits, along with other nationwide permits. Basically the ACOE is proposing to re-issue, or modify the current permits. They also propose some new ones; these are not assigned numbers but rather for now are listed as A, B, C, D, etc. For the NWP 21, basically, they're asking for comments on why, how it should be structured, whether there would be size limits, acreage limits, etc. DMLR agreed that there should be some limits but they should not be just size limits, that just arbitrarily picking a drainage area was not the right approach, that if you were having a contour cut, along the lower reach of a stream, with no disturbance above it, that you could trigger an IP, if you were only going on a drainage area alone, with not much disturbance at all, within jurisdictional waters. DMLR did not suggest a solution, just commented that the ACOE needed to come up with a reasonable approach where you don't end up doing an IP on a real small project. The other wildcard is an appeal where a federal judge is ready to rule on NWP 21 permits, only he is going to rule on the old Nationwide Permit (NWP) 21, which puts everything in question, for the ACOE rule making. This can be very confusing between now and March 18, when the current NWP 21 expires and when the new one comes out.

The ACOE has recognized re-mining. The proposed NWP-E addresses coal re-mining activities. For this to apply for a project, a permittee may conduct coal mining activities in an adjacent area, provided the newly mined area is less than forty percent of the area being re-mined and re-claimed. This is being limited to forty percent new coal, which is unrealistic. DMLR has commented on this, asking that it be re-visited.

Coal preparation (processing outside of the mine-site) may be authorized by the proposed NWP F. There is re-wording of several of the Nationwide Permit General Conditions.

Annette Poore advised on March 18, 2006, that if the NWPs are not finalized, the ACOE would issue an extension for a sixty-day period.

### **Total Maximum Daily Loads and Your Permit**

**Les** - When a permit is applied for and the TMDL for that watershed has already gone through the process and approved, DMLR must follow the TMDL requirements. The proposed permit will be evaluated, and a determination made on how it will fit in the TMDL, the load allocations available, and the potential impact it can have on the proposed discharges in the permit. There is a potential from TMDL's that it may limit your permit. If the load allocations are used up, or depending on what that proposed load was, whether it was TDS, TSS, or even iron, it could be limiting. DMLR will work through the process with the company. There are options to come in and reduce the load from the proposed or existing sites.

Several TMDL's will be issued by 2018. DMLR fully expects new stream segments to be added during that time frame. As more data becomes available, and DEQ comes out every two years with the impaired stream's list, there are new streams on it. DMLR is in the process, internally, of compiling a list of things to work with the companies on. The TMDL is basically a regulation, and permitting must be done within the framework of the approved TMDL.

DMLR will get a smaller group together to work on some guidance for TMDL in the near future.

### **Mike** - TMDL PowerPoint Presentation

DMLR has been developing new procedures and software to implement the TMDL requirements for the coal mining discharge in our area, and recognize the TMDL requirements represent a significant addition to the agency's, consulting companies, and operator's work loads. This will require more time for review by DMLR, the consulting company's application preparation time, and industry mine planning.

In addition to the seven currently approved TMDL watersheds, there are thirty impaired stream segments that will eventually have some type of TMDL's associated with them. It is estimated that seventy-five percent of the permits processed, will have some type of TMDL review or requirement. DMLR will have to calculate load on a quarterly basis, for each watershed, and for every

application that comes in, and as well, for every revision for that permit application, a calculation will have to be done, as changes are made.

Calculations have been developed for Manganese, Iron, and TSS. Additional calculations will be developed, as different stressors are identified. Calculations have been done for constructed, not-constructed, and proposed outfalls. The constructed outfalls are fairly straight forward, as there was monitoring data to do the calculations on, but with the non-constructed and proposed outfalls, calculations were done by estimating loads.

In calculating loadings, previously mined areas are considered. In the past, TMDL's with previously mined areas had their own load associated with them, and when the area is mined through, that load is gone, and a credit is given for mining those areas. This will be done, based on previously mined area acreage, versus, the total watershed of that outfall.

The not constructed outfalls are those that have been through the review process, been approved, but not constructed in the field. That amount of load has to be accounted for, with the possibility of approving NPDES points that haven't been constructed in the watershed. They could actually exceed the waste load allocation available for the mining industry. DMLR has come up with an average flow per watershed acre and an assumed concentration, with the data for a particular watershed, going back to 1995, normalized on an acreage basis, with an average flow per acre, in that watershed, from an outfall.

Not constructed loads would be the average flow pressure for the watershed, times thirty-five milligrams per liter, TSS, times a conversion factor, adjusted by how many acres were previously mined.

The proposed outfalls are those that are proposed in an application that haven't been approved yet, and which will go through a similar process, the average flow grade of the watershed, times thirty-five milligrams per liter, TSS, times the conversion factor, and this would be adjusted for previously mined lands.

The constructed outfalls are typically sampled, twice per month, six times per quarter, and each sample represents a certain number of days. Each sample is weighted by the number of days it represents, the recorded flow measurements, the measured concentrations, and then multiplied with a conversion factor to get the load for that outfall. If a precipitation exemption is taken for that sample, it has to be estimated, the amount of TSS that would have been produced for that event. If a precipitation exemption was taken, the measured flow would be taken, the same time weight, using the seventy milligram per liter TSS, to estimate the amount of suspended solids that would be produced by that event, then multiplying that by a conversion factor, and it gets added back together, then adjusted again for any previous mining done.



Les advised the group that this was a first cut at a system to use for permits. Several permits has been issued and gone through this process. This is a conservative start by DMLR, which will be used until a smaller group can convene and discuss different means to address these types of issues.

Gerald Ramsey asked about allocation loads. Mike advised that DMLR staff needs to talk with DEQ about trading, where there's not an allocation load available. Trading would involve going in and cleaning up abandoned mine land (AML) features within the watershed that would offset the stressor loading..

Les said after January 1, 2007, the group should be prepared to come to Big Stone Gap and talk TMDL's. Electronic Permitting is being revised to do these calculations, once decisions are made how processing of data will be done.

### **U.S. Fish and Wildlife Service T&E Issues**

**Les** - Dan Sweeney called Butch last week and advised that DMLR needs to work with the U.S. Fish and Wildlife Service (USFWS), on their proposed to do toxicity studies on six sites, five in Virginia and one in Tennessee. The U.S. Environmental Protection Agency (EPA) will give right of entry if DMLR does not do so. The group was asked whether they want this done by DMLR or EPA, and to go back and discuss this and get with Les next week.

**Brian** - Power Point presentation about Species Specific Protective Measures and what they are.

The Science Issues Workgroup composed of USFWS, DMLR, and OSM, has been meeting since March 2006 on this topic. Typically USFWS does a consultation, formal or informal, for federal action. However, SMRCA authority has been delegated from OSM to the states, including Virginia. The USFWS wrote a formal-programmatic, biological opinion, which is the Section 7 consultation for mining. The biological opinion was written in 1996, which is noteworthy as the biological opinion from that date has not been fulfilled and is what the Science Issues Workgroup is working on.

Key points about the biological opinion:

- The opinion says to follow the Surface Mining Control and Reclamation Act (SMCRA) and you won't jeopardize the continued existence of listed species.
- One of the conditions is that USFWS, together with DMLR, and OSM, as an oversight agency, will get together and work out what these protective measures are.

- A proposed measure developed so far is, initially if you're within 10 miles of a listed species, or its critical habitat, that will trigger the implementation of species specific protective measures such as monitoring. This will be implemented through the DMLR permit or permit application. The monitoring will be done for a five year period, with adjustments for up-stream or down-stream, depending on how close the proposed operation is to a listed species or a critical habitat.

The group has come up with six general measures that will be protective of listed species. Two of them:

1. Maintain intact riparian zones, or restoring those zones if previously destroyed.
2. USFWS would like to see the bio-monitoring data and tracking to see if there is any impact from the project site.

Mike Pinder, Game and Inland Fisheries and Brian Evans are working on a list of the best bio-monitoring techniques. The two components of bio-monitoring USFWS would like to see is fish and macro invertebrates. The Clinch dace is a new species of fish that might not have been recognized had it not been for monitoring by coal mining).

For fish, they recommend sampling of the perennial streams. TVA has some very good indexes to access the health of the fish community, which includes sites in Virginia.

Bugs have also been included, with recommended sampling, twice per year, including intermittent streams, and the metric used should follow the protocol used in eastern Kentucky.

DMLR will determine how the data is input into the permit, with recommendations from USFWS. If the change in the bio-monitoring is detected, and is a negative change, USFWS wants to know, in order to revisit the site and see if any action is needed to quickly fix the problem.

USFWS is recommending some toxicity testing of effluents, in addition to testing already done for the NPDES permits. Some of the chemicals used today are not being monitored for by the companies. If after several years if no toxicity is detected, the company can drop the studies.

Water Quality standards – To discourage bad discharges, the color (general criteria) standard may be helpful.

Some general common-sense risk reductions include; examine how frequently road sumps are cleaned out, secondary containment for chemicals, approved list of chemicals that will be allowed in Virginia's mining sites, times of year restrictions,



slurry sight and handlings and slurry failures (will rely on DMLR to recommend best way to handle those processes).

USFWS is interested in stream restoration projects. There are opportunities for collaboration between the different agencies that will benefit some of the areas affected by mining.

Brian advised they would like to have the measures in writing by March 2007. The goal of the study is to see what needs to be done to see that our trust resources are protected.

### **Slurry Injection Guidelines**

**Les** asked the operators to get information from their suppliers and chemical companies to come up with a list. DMLR will go in and partner with the coal companies to do toxicity testing if necessary. This information is covered as proprietary in DMLR's regulations and would be available to the agency only and not subject to the Virginia Freedom of Information Act.

### **Certifications**

**Les** informed that from this point on, anytime that an inspector receives a certification that he feels is faulty, whether it is during construction or as-built, for ponds, fills, or whatever, they will notify the Big Stone Gap office, and someone will be sent out to look at it, if need be, rather than the certification being stamped and turned in. All certifications will be checked before submitting to the office and if necessary assistance provided from the technical section of DMLR.

### **Digital Permit Maps and Plans Updates**

**Daniel** Kestner updated on a coordinate system change. DMLR will make a data change from NAD27 to NAD 83's for all the submitted drawings, point data, and all other data provided to industry. Information will be forthcoming, or contact Daniel with questions, with changes occurring in the next 3 or 4 months.

**Harve** Mooney gave an update on the Digital Mapping Permit workgroup, whose task was to develop standards to improve the efficiency of the permit mapping process. On November 10, a meeting was held, and the general templates are now complete. There are still questions outstanding as to the specificity of the maps, and the group will meet with DMLR, management, and supervisors, for discussion and changes. A meeting will be held in January for wrap-up, afterwards industry will be sent a template, to fill out information and return to DMLR.

## Conclusion

**Les** - As of January 1, 2007, everything has to be turned in electronically. He advised that Gerald Collins will be leaving DMLR on February 1, 2007, after five years, and will be missed by the agency for his contribution to electronic permitting, and other efforts. The group was encouraged to return to the Regulatory Work Group meeting after lunch.

## DMLR REGULATORY WORK GROUP

**Stream Restoration Standards** (moved to #1 agenda item, *italicized-new language, strike-throughs-deletion*)

**Les – 4 VAC 25-130-816.43 – Diversions** (modified versions that struck the portion of the regulation not in the old OSM regulation regarding the rip rap sizing, legal section to approve other criteria, which would include OSM)

### 4 VAC 25-130-816.43 – Diversions

#### (a) General requirements

Diversions which convey water continuously or frequently shall be *designed by a qualified registered professional engineer and constructed to ensure stability and compliance with the standards of this Part and any other criteria set by the Division* ~~lined with the rock rip rap to at least the normal flow depth, including an allowance for freeboard. Diversions constructed in competent bedrock and portions of channels above normal flow depth shall comply with the velocity limitations of Paragraph (5) below:~~

<del>Vegetated channel constructed in soil</del>	<del>3.5 feet per second</del>
<del>Vegetated channel with jute netting</del>	<del>5.0 feet per second</del>
<del>Rock rip rap lined channel</del>	<del>16.0 feet per second</del>
<del>Channel constructed in competent bedrock</del>	<del>No Limit</del>

### 4 VAC 25-130-817.43 Diversions

#### (a) General requirements

(4) Diversions which convey water continuously or frequently shall be *designed by a qualified registered professional engineer and constructed to ensure stability and compliance with the standards of this Part and any other criteria set by the Division* ~~lined with rock rip rap to at least the normal flow depth, including an allowance for freeboard. Diversions constructed in competent bedrock and portions of channels above normal flow depth shall comply with the velocity limitations of Paragraph (5) below:~~

(5) ~~The maximum permissible velocity for the following methods of stabilization are:~~

<del>Vegetated channel constructed in soil</del>	<del>3.5 feet per second</del>
<del>Vegetated channel with jute netting</del>	<del>5.0 feet per second</del>

Rock rip rap lined channel	16.0 feet per second
Channel constructed in competent bedrock	No limit

DMLR does plan on going back after finalization of these regulations and trying again to insert a section that deals with the ACOE approved stream restoration. No comments were received at the August 3 meeting and DMLR therefore proposes that this be submitted as the final language for the state site and federal, program amendment.

Tabitha Peace was introduced as DMLR's new policy analyst and will be working on regulations.

## **Self Bonding**

### **4 VAC 25-130-801.13**

**Les** – Benny Wampler has asked us to look at this regulation compared to the federal program.

Gerald commented on Page 2, Item 3, most companies will not be able to meet the required ratios and would likely be prevented from using self-bonding.

Les asked Annette whether the ACOE accepted Self-Bonding and she is to check on this. If the ACOE does not, Les said an exclusion for ACOE mitigation projects may have to be made in the regulation if the ACOE does not accept self bonding for mitigation projects.

The group was asked to take this regulation back and review, as this is the first cut, and to get back with Les with any questions or discussion.

This regulation will not be retroactive to existing self-bonds. Previously, the self-bonded amount could be 50 percent of the net worth. This would decrease to 25 percent, which has been taken from the federal regulation.

Les asked for the group to get back with him with feedback on a due date for the financial statement from a CPA. This date has not been specified and a recommendation is for date certain, possibly a set date or an anniversary date.

**After more group discussion, Greg suggested May 15 or June 1 as probable due dates.**

January 5, 2007 is the date for comments on this regulation, with Annette getting back to Les by this date, with her information.

## **Topsoil and Revegetation Standards**

**4 VAC 25-130-816.22. Topsoil and subsoil**

**4 VAC 25-130-816.116. Revegetation; standards for success.**

**4 VAC 25-130-817.22. Topsoil and subsoil**

**4 VAC 25-130-817.116. Revegetation; standards for success**

**Les** - DMLR has inserted changes from the August 30, 2006, OSM federal register. The regulations for 816 and 817 are identical, **816** section relates to strip-mining and **817** relates to underground

The change on the topsoil regulation allows a variation in the thickness when replaced, and helps meet vegetation goals (*soil thickness may also be varied to the extent such variations help meet the revegetation goals identified in the permit*).

Change to re-vegetation regulation (2) (ground cover, production, or stocking shall be considered equal to the approved success standard when they are not less than 70 (90) percent of the success standard).

Gerald asked if the AML two-year bonding for re-mining got reauthorized over the weekend with Les advising it has to be in the language.

Discussions have been held with Tech, about fish and wildlife areas and land uses. DMLR would like to see this incorporated. He asked for the group to consider if this needs expanded in the regulation, or left as is.

February 1, 2007 is the due date for comments on Self-Bonding and Topsoil and Re-vegetation Standards.

No packages can be submitted after legislation goes in session, so language can be added, with submittal in April or May of 2007.

## **Bond Releases**

**Les** - There is still no draft language for enhancing/improving bond releases, and DMLR is still waiting for ideas from industry. Per the TMDL presentation, more bond releases will likely be needed to get some of the permits issued in the TMDL watersheds. This needs to be expedited. DMLR has seen companies contesting other companies permit applications that are in the same watershed. The group needs to work on this process, to get it worked out and decide how to address these issues.

TMDL is tied to many issues, including bond releases, pond removals, and re-mining. These all count in the TMDL process in determining load allocations.

DMLR intends on improving the contract language with TMDL contractors, stipulating that the required input data, mapping, other information, etc. be provided, with the required data available for industry.

Discussion has been held about DMLR doing the bond releases (an administrative bond release, which would likely require a fee). As an example, there are incidents of companies no longer in business and the bond needs to be released. DMLR has made a commitment that they will not be the holdup for bond releases for which the required performance measures have been met.

Les thanked the group for their attendance and comments and the meeting was adjourned.